

Yi Zhang

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Backend/Data/Infrastructure Engineer | Creative Problem Solver

SKILLS

Languages

- Python • Java • SQL • C++
- JavaScript • R • MATLAB
- Haskell • Elm • Bash

Technologies

- AWS • Google Cloud Platform
- Docker • Kubernetes
- PostgreSQL • MongoDB
- Snowflake • Elasticsearch
- Django • Spring Boot • Node.js
- React • Vue.js
- Circle CI • Jenkins • Github Actions
- git • Kafka
- sklearn • Tensorflow • Keras
- Prometheus • Grafana
- Looker • Tableau
- Spark • Hadoop

LINKS

Github:// [yizhang7210](#)

LinkedIn:// [yizhang7210](#)

Engineering Blog:// [blog](#)

Fun Project:// [traffic-light-simulator](#)

EDUCATION

University of California, Berkeley

MASTER OF INFORMATION AND DATA SCIENCE

2021 - 2023 | Berkeley, US

University of Waterloo

PH.D. COMPUTER SCIENCE

(withdrawn)

2014 - 2015 | Waterloo, Canada

Area: Applications of Boolean functions

Imperial College London

BSC + MSC MATHEMATICS

2010 - 2014 | London, UK

1st Class Honours

AWARDS

Capital One Data Mining Cup

WINNING TEAM

02/2015 | Toronto, Canada

EXPERIENCES

Meta | STAFF ENGINEER

02/2024 – present | San Francisco Bay Area

Reality Labs (Wearables)

- Tech Lead of **E2E Test Infrastructure** for all Wearables products
- Led an effort to migrate >2000 tests across 5 products to a new execution framework, making them **7x more reliable** & up to **40% faster**.

Search AI

- Integrated a number of SOTA search retrieval technologies for Facebook & Threads, including term importance & content embedding models.
- Brought personalization into FB search retrieval, integrating high quality social signals & improving search engagement by **0.5%**.
- Optimized the indexing & retrieval processes, saving **0.8%** of search capacity.

Unit21 | TECH LEAD MANAGER -> STAFF ENGINEER

10/2020 – 02/2024 | San Francisco

- Built a brand new version of Unit21's core Transaction Monitoring execution framework end-to-end, increasing its performance by **50%** and supported **10x** more functionality.
- Tech led a multi-year migration of the entire application to a new **persistence engine**, across **5** teams involving **20+** engineers and building **4+** new components, raising the ceiling of data volume by **30 fold**, and reducing the unit cost by **50%**.
- Oversaw the architectural migration to **Microservices**, actively contributed to 3-4 services, **more than doubled** the iteration speed of the ML team.
- Grew a team from **3** to **15** people and owned many org-wide initiatives such as hiring processes & OKR planning.

Wise (ex. TransferWise) | SENIOR SOFTWARE ENGINEER

10/2018 – 10/2020 | New York

- Developed an optimized internal development environment on Kubernetes, improving setup time from **2.5h** to **6min**.
- Built full stack features to aid fraud fund recovery within a large scale Microservices architecture.
- Established a Spring Boot template, used for 100+ new internal services.

Others | SOFTWARE ENGINEER

09/2015 – 10/2018 | Toronto, Canada

- Lead Engineer @**Kooltra**, a Foreign Exchange back office system.
- Software Engineer @**Connected**, and built a prototype IoT platform.
- Software Engineer @**OANDA**, a currency trading company.

PUBLICATIONS

SYSTEMS AND SOFTWARE PRODUCT LINE CONFERENCE (SPLC)

09/2016 | Beijing, China | Best Paper Award

- *A Mathematical Model of Performance-Relevant Feature Interactions* with J. Guo, E. Blais, K. Czarnecki, H. Yu

AUTOMATED SOFTWARE ENGINEERING CONFERENCE (ASE)

11/2015 | Lincoln, NE, USA | Distinguished Paper Award

- *Performance Prediction of Configurable Software Systems by Fourier Learning* with J. Guo, E. Blais, K. Czarnecki